Federal Emergency Management Agency

Work In Progress

March/April 1999

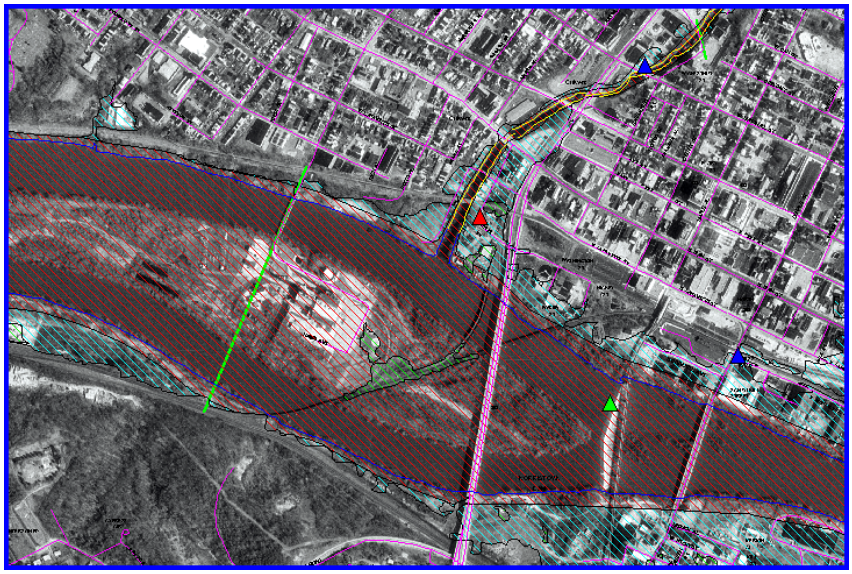
Modernizing FEMA's Flood Hazard Mapping Program

A Message From Mike…

For the first time since 1986, the Administration has submitted a budget package to the U.S. Congress that contains a request for direct appropriations and a new fee-based source of funding to support the mapping activities of the National Flood Insurance Program. In addition to the authorization request to spend $50 million expected to be generated from flood insurance policyholder and map revision fees, the FY 2000 budget package includes a one-time appropriation of $5 million for FEMA's Map Modernization initiative. More significant is the request for the establishment of a $15 fee to be applied to federally regulated mortgage transactions to be deposited in the Map Modernization Fund, a proposed new account in the U. S Treasury. The Office of Management and Budget estimates the new fee will generate $58.5 million, bringing the total FY 2000 funding request for mapping to $113 million.

This is a major step in the pursuit of a modernized flood hazard mapping program, and the result of a lot of hard work by many people inside and outside FEMA. Director James Lee Witt played a key role in his persistence with OMB. The Technical Mapping Advisory Council and the many organizations outside FEMA who have written letters or adopted resolutions in support of modernizing the maps (**see Bandwagon**) were a critical element. Associate Director Michael Armstrong and the FEMA staff who have been promoting support and planning for a reasoned and comprehensive program deserve credit as well. We would not be where we are today without the dedicated efforts of these people and groups.

See "Mike's Message," on page 12



USGS

Digital orthophoto with flood hazard data overlay.

FEMA Revises Vision for DFIRM 2.0 and 2.1

FEMA's Map Modernization Objective 4 workgroup recently revised its vision of the DFIRM 2.0 and 2.1 products. Instead of thinking of them as two separate products, the workgroup is now combining them into one DFIRM product with options that can be invoked depending on the available data. This new DFIRM product combines the concepts of the DFIRM 2.0 and DFIRM 2.1 products into a single product that includes certain basic features and meets certain minimum mapping requirements. The new product allows for the inclusion of additional options depending on community needs and available funding. A community's review of its needs and available data leads to a time and cost estimate and a recommendation of which options to exercise.

The new DFIRM product will combine flood hazard data in vector format with a vector or raster base map. Current DFIRMs can be transferred to the new DFIRM format with the addition of a base map that can be distributed digitally. No integration of current Q3 Flood Data or scanned images of FIRMs is envisioned for the new DFIRM production, although a scanned version will probably remain an option for distribution formats. The Q3 product will remain in place until the community or county is converted to the new DFIRM product, at which time they will be permanently retired. The goal is to have DFIRMs for all communities participating in the National Flood Insurance Program.

See "DFIRM," on page 12

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Inside This Issue:

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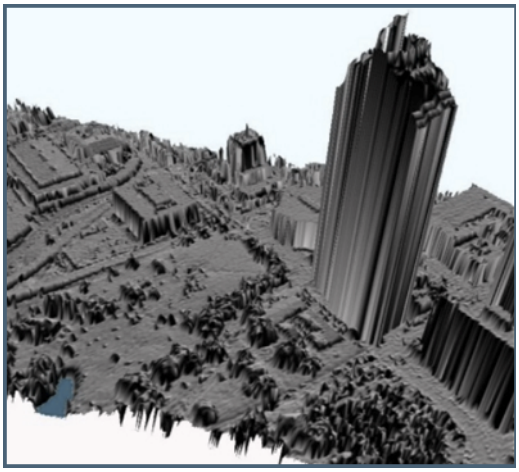
FEMA Staying Ahead Of Trend Toward Use Of Remote-Sensing Technologies

Technology is making it possible to acquire Digital Elevation Models (DEMs) faster and less expensively than before. Karl Mohr and the Map Modernization Objective 2.5 work group want to make sure FEMA stays ahead of this trend.



TerraPoint™

Remote-sensing techniques (such as LIDAR) provide economic, elevation and structure data.

During the next several months, the group will complete an evaluation of complicated sets of remote-sensing data gathered during recent flights over several sites in California. Two emerging remote-sensing technologies — LIght Detection And Ranging (LIDAR) and InterFerometric Synthetic Aperture Radar (IFSAR) – were used in the test flights.

LIDAR is an airborne laser system that combines a pulsing laser with a positioning system consisting of a Global Positioning System (GPS) receiver and an Inertial Measuring Unit (IMU) to measure the elevation of ground points on the earth's surface. It offers a very rapid option for developing a DEM at accuracy levels between 15 and 30 centimeters along narrow corridors such as shorelines, waterways, and levees.

IFSAR is a technology that uses airborne or spaceborne radar antennae to obtain terrain data over larger geographic areas. It is an all-weather system for generating elevation data to an accuracy level between 1.5 and 3 meters over broad areas more quickly and less expensively than standard aerial photogrammetric processes.

Mr. Mohr says he believes the new technologies offer great potential for helping FEMA modernize the Flood Insurance Study (FIS) process. Both technologies are currently being used to collect terrain surface data worldwide by firms in the United States and Canada.

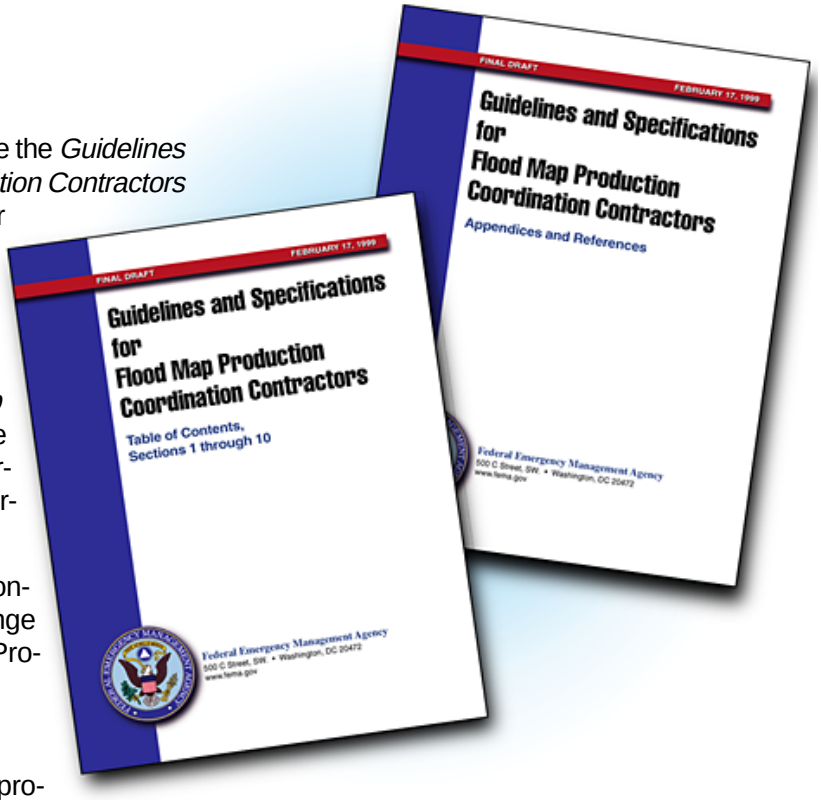
Mr. Mohr predicts that, because the use of LIDAR and IFSAR can reduce the cost of developing contour maps by as much as 50 percent while increasing map accuracy, the use of these technologies in FISs will increase during the next several years.

"We want to be an active player in the ways remote-sensing technology is used to acquire accurate contour information for use in FISs," Mr. Mohr says. "We have the opportunity to make this process more efficient and less costly that ever before."

Karl Mohr *(karl.mohr@fema.gov) is a Senior Engineer in the Mapping Support Branch of the Mitigation Directorate.*

Revised Guidelines and Specifications On the Web

Map Modernization Objective 22—to revise the *Guidelines and Specifications for Flood Map Production Coordination Contractors* and develop a Statement of Work and a Request for Proposal for re-procuring Flood Map Production Coordination Contractor services beginning in FY2000—is now complete.



The document's title reflects FEMA's decision to change the title *Technical Evaluation Contractors* to *Flood Map Production Coordination Contractors* (FMPCCs) to more accurately reflect the nature of the work that will be performed for FEMA in support of the National Flood Insurance Program and the Map Modernization initiative.

The name change occurred with the initiation of the Contractor Selection Process in February. The name change will take effect at the end of the Contractor Selection Process later this year.

The *Guidelines'* features include:

- Additional information about the responsibilities for providing support for the Map Modernization Program, the CTC Program, the 5-Year Map Review/Update Process and for training workshops for FEMA contractors and constituents
- A revised discussion of contractor responsibilities for the fee-charge system and fee exemptions for conditional and final map amendments and revisions
- Revised information on base map preparation procedures
- Significant revisions to the discussion of contractor responsibilities for maintaining archival data, processing data requests under the Freedom of Information Act, and processing other external data requests and reprint requests
- Additional information about contractor responsibilities for providing web page support and support to the FEMA Map Assistance Center, the LOMC Distribution Service and the Map Service Center
- A complete revision of the discussion on erosion studies, in accordance with potential changes to the National Flood Insurance Reform Act
- An expanded discussion of materials required for alluvial fan studies
- More information about Q3 Flood Data and the DFIRM process and products

The *Guidelines and Specifications for FMPCCs,* also available on our Internet site ***(www.fema.gov/mit/tsd/frmguide.htm)***, supersedes the December 1993 version of the *Guidelines and Specifications for Technical Evaluation Contractors*.

FEMA Announces Contractor Name Change

To more accurately reflect the nature of the work that will be performed for FEMA in support of the National Flood Insurance Program and the Map Modernization initiative, FEMA's Technical Evaluation Contractors will soon be known as *Flood Map Production Coordination Contractors,* Agency officials announced late last month.

The announcement came in conjunction with the initiation of the Contractor Selection Process and the simultaneous unveiling in February of the new *Guidelines and Specifications for Flood Map Production Coordination Contractors*, which replace the current *Guidelines and Specifications for Technical Evaluation Contractors*. The name change will take effect at the end of the Contractor Selection Process later this year.

Alan Johnson *(alan.johnson@fema.gov) is a Hydraulic Engineer in the Technical Services Division.*

NASA [http://southport.jpl.nasa.gov]

Death Valley, California. The image shows the Furnace Creek alluvial fan.

Work in Progress was produced with the valuable assistance of many individuals in the Mitigation Directorate and across FEMA who contribute to the success of the Map Modernization Plan.

Michael J. Armstrong
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Alluvial Fans and Map Modernization

FEMA, as a federal agency, has great influence over the way communities manage and mitigate flood hazards. FEMA's influence comes both from its congressional mandate and from its role in implementing and enforcing National Flood Insurance Program (NFIP) regulations. When FEMA designates an area as subject to alluvial fan flooding, rather than ordinary riverine flooding, it sets in motion specific federal regulations. Because such a designation can affect development opportunities, it can be controversial.

In the western United States, some of the most intense conflicts have revolved around development on alluvial fans, which can be susceptible to a particularly catastrophic type of flooding. Controversy over alluvial fan flooding issues led FEMA to ask the National Research Council (NRC) for assistance. As a result, the NRC established the Committee on Alluvial Fan Flooding with a membership composed of eight engineers and earth scientists, all of whom have experience with alluvial fan flooding. The Committee on Alluvial Fan Flooding was charged with studying how to improve the way FEMA addresses alluvial fan flood hazards in the context of the NFIP.

The committee recognized the complexity of the issue with regard to both the technical and regulatory aspects. In addition to the diversity of the flood hazards themselves, it was recognized that FEMA must deal with a wide range of communities, some of which do not have the resources for a technically sophisticated floodplain management program. Part of FEMA's leadership responsibility, therefore, is to set a consistent example.

The committee came up with six key conclusions and six key recommendations regarding alluvial fan flood hazards. As part of the Technical Services Division Map Modernization Objectives, FEMA is evaluating how the committee's key conclusions and recommendations can be incorporated into FEMA's approach to the mapping and management of alluvial fan flood hazards. In addition, two key constituencies have recently highlighted the need for better mapping and management of alluvial fan flood hazards: the Technical Mapping Advisory Council and the Western Governors' Association.

This technical objective involves: 1) better documentation of current procedures for evaluating and mapping alluvial fans based on the FAN computer program and related alternative methods, 2) incorporation of additional methods for evaluating and mapping alluvial fan flood hazards including those recommended by the NRC, and 3) overall clarification and guidance with regard to the criteria and approaches used to evaluate and map alluvial fans.

FEMA is currently working closely with the Flood Control District of Maricopa County, Ariz., and the State of California's Department of Water Resources toward implementation of locally initiated approaches to alluvial fan flood hazard assessment and mapping. In addition, meetings with members of the NRC are ongoing.

Mike Grimm *(*michael.grimm@fema.gov*) is a Hydraulic Engineer in the Hazards Study Branch of the Technical Services Division.*

Cooperating Technical Communities Program Set to Begin

In response to the challenge of updating and maintaining the nationwide inventory of flood hazard information, FEMA is currently formulating the innovative Cooperating Technical Communities (CTC) partnership program. The program is designed to share ownership of flood hazard maps among state, regional, and local entities through increased involvement in the mapping process.

"The CTC program is designed to share ownership of flood hazard maps among state, regional, and local entities through increased involvement in the mapping process."

To address the challenge of updating and maintaining flood hazard information in the most timely and cost-effective way, FEMA is exploring opportunities for establishing partnerships with sources that are intimately familiar with local floodplain issues: the communities themselves. By creating a strong local program that reinforces the connection between mapping and floodplain management among the participating communities, the NFIP will be better able to reduce losses to lives and property.

Along with their knowledge of local flood hazards and conditions, many communities possess the resources to perform various components of the mapping process, such as reviewing hydrologic and hydraulic analyses or incorporating map amendments into the FIRM. CTC participants would assume responsibility for certain products or services, with FEMA providing technical guidance as necessary.

The CTC agreements will entail sharing digital base map data, DFIRM preparation and maintenance, development and review of hydrologic and hydraulic data, and risk assessment. The guidelines and specifications for these various tasks under the cooperative agreements have been drafted and are currently under review by the CTC work group members.

At this time, FEMA is also developing participant selection criteria and program implementation procedures. The standards are being developed to consistently and flexibly accommodate local needs, opportunities and constraints. FEMA is also creating a public awareness campaign to inform potentially interested communities about the CTC Program. Future plans include informational slide presentations and website development.

Work group members have reviewed the draft CTC Program documents. Their comments and concerns are being addressed and incorporated, as necessary, into a final document. Plans call for the first CTC agreements to be issued to pilot communities in the early summer.

Bel Marquez *(*bel.marquez@fema.gov*) of FEMA's regional office in Atlanta, is manager of the Cooperating Technical Communities Objective.*

Monitoring Information on Contracted Studies (MICS)

As FEMA's Regional Engineers strive to better serve the NFIP, automating portions of the study contractor monitoring process is necessary to maintain the high quality of the work. Although the Community Information System (CIS) provides some of the required information, this system is community-specific and does not contain all the project management or accounting tools to effectively automate the contracted study process. The Monitoring Information on the Contracted Studies (MICS) system is designed to complement the CIS by tracking contracted studies from initiation to completion.

The MICS system is a study-specific system designed for use by regional engineers, Study Contractors (SCs), Technical Evaluation Contractors (TECs) and FEMA Headquarters. Specifically, MICS is designed to: 1) include information on SC selection and contract awards, 2) track budgets in both hourly and dollar amounts, 3) record details of monthly SC contacts and regulatory visits, 4) include Special Problem Reports and 5) provide SC-specific information. Overall, the MICS system will improve productivity by reducing the number of hours spent by the regional engineers monitoring SCs, automating many of the forms associated with the study contracting process, enabling faster response to special problems, maintaining an accurate and thorough contracting and invoicing history of all study contracts and providing a uniform and timely report of the status of contracts across regions.

The MICS system is a user-friendly, Windows-based application. It is composed of three tiers of software, which will reside on two servers located at FEMA Headquarters. The Java-based user interface provides user-friendly screens to access and navigate the system. The MICS system will be available to FEMA Headquarters, Regional Engineers, the SCs, and the TECs after a 3-month beta testing period.

Bill Blanton *(*bill.blanton@fema.gov*) is a Hydraulic Engineer in the Technical Services Division.*

Map Modernization Objectives

FEMA is embarking on a number of Map Modernization objectives for improving the NFIP and its map products. Following is a list of the objectives:

1. ☑ Develop and implement an outreach program to include:

- Exhibit for conferences
- Outreach to key constituencies
- Updated briefing packet
- Congressional outreach
- ***Work in Progress*** Bulletin

(Anne Flowers, anne.flowers@fema.gov)

2. ☑ Develop revised, minimum base map standards for hazard mapping and implement for all new hazard maps as soon as practicable, and not later than FY 1999. (John Gambel, john.gambel@fema.gov)

2.5 ☑ Complete assessment of advanced technologies for preparing topographic mapping and work maps required for the production of Flood Insurance Studies and Flood Insurance Rate Maps. Implement the technologies for study starts in FY 1999 by developing appropriate appendices to "FEMA 37, Guidelines and Specifications for Study Contractors," developing training module, and presenting to FEMA Regional and National office staff. (Karl Mohr, karl.mohr@fema.gov)

3. Develop flexible, prioritized spending plan for map modernization that maximizes alternative sources of funding. (Michael Buckley, mike.buckley@ fema.gov)

4. Develop product specifications for Digital Flood Insurance Rate Map 2.0 and 2.1 (for converting existing manual inventory of Flood Insurance Rate Maps to digital format, and for our new flagship digital multi-hazard map product, respectively) and implement no later than FY 1999. (Mary Jean Pajak, mary. jean.pajak @fema.gov; and Mike Grimm, michael.grimm @fema.gov)

5. Develop Cooperating Technical Communities program to support Project Impact. (Bel Marquez, bel.marquez @fema.gov)

6. ☑ Initiate pilot Cooperating Technical Communities Program. (Project Impact staff and regional staff)

7. Bring ongoing cooperative initiatives to a successful completion, including: Maryland (Anne Flowers and John Benn, john.benn@fema.gov); New York (Phil Myers, phil.myers@fema.gov; and Paul Weberg, paul.weberg@fema.gov); Georgia (Mary Jean Pajak and Bel Marquez); Midland, Texas (Alan Johnson, alan.johnson@fema.gov; and Region VI staff); and Boone County, Nebraska (Alan Johnson and Region VII staff).

8. ☑ Develop standards and procedures for mapping future condition hydrology. (Mike Grimm)

9. ☑ Develop architecture for the Technical Services Division's Web site. Design to address product distribution, dissemination of information regarding map status, receipt and response to appeals, archives, and other functions. Formulate management structure, cost, and personnel requirements for implementation. (John Magnotti, john.magnotti@fema.gov)

10. Establish partnership with the National Geodetic Survey (NGS) for assistance in establishing and disseminating geodetic data, such as linking elevation reference mark information on Flood Insurance Rate Maps to the NGS's Web page for geodetic data. (John Gambel)

11. Establish partnership with the U.S. Geological Survey for assistance in developing and maintaining suitable base maps and topographic data compatible with NFIP needs. This includes making Digital Ortho Quads as readily accessible and usable as base maps. (John Gambel)

12. ☑ Establish partnership and provide technical assistance to Fish and Wildlife Service resulting in the Service's improved mapping of Coastal Barrier Resources System (CBRS) areas. Specifically, encourage and assist the Service in producing digital, vector mapping suitable for direct incorporation as a thematic layer in Digital Flood Insurance Rate Maps as well as posting on the World Wide Web. Improve and extend mapping of CBRS-protected areas. (Frank Tsai, frank.tsai @fema.gov)

13. Establish standard operating procedures for making hazard verification part of recovery cycle after Presidentially declared disasters. (Doug Bellomo, doug.bellomo @fema.gov)

14. ☑ Bring the toll-free FEMA Map Assistance Center on line. (John Magnotti)

15. Complete work on the automatic Letter of Map Amendment tracking and letter-generation software, also known as LOMA 2000. (Mark Crowell, mark. crowell@fema.gov)

16. Lay the groundwork for delegation of authority for issuance of Letters of Map Amendment and Letters of Map Revision Based on Fill to community officials and the private sector. Meet with ASCE, ASFPM, ACSM, FMDA, and NAFSMA. (John Gambel)

17. ☑ Develop new study processes, i.e., redefine the Technical Evaluation Contractor/Study Contractor relationship and begin limited implementation in FY 1998, with at least one pilot in each territory. (Marty Frengs, martin.frengs@fema.gov)

18. Fully implement multi-year contracts and task ordered contracts for procuring Flood Insurance Studies. Transfer the procurement process to the three territories. (Larry Basich, lawrence. basich@fema.gov)

19. Continue implementation of 5-Year Map Review/Update Process and make it an integral part of the Flood Insurance Study procurement process. Ensure close regional and State involvement. (Cindy Croxdale, cindy.croxdale@ fema.gov)

20. Develop improved systems for monitoring contracted Flood Insurance Studies. Implement Monitoring Insurance Contracted Studies (MICS) software. (Eric Berman, eric.berman@fema.gov)

21. Revise FEMA 37, "Guidelines and Specifications for Study Contractors" and implement for Flood Insurance Studies starting in FY 2000, or partially implement in FY 1999. (Phil Myers, phil.myers @fema.gov)

22. Revise "Guidelines and Specifications for Technical Evaluation Contractors" and develop statement of work and request for proposal for re-procuring Technical Evaluation Contracts to begin in FY 2000. (Alan Johnson)

23. Oversee all aspects of awarding new Technical Evaluation Contracts to begin in FY 2000. (Cindy Croxdale)

24. Oversee all aspects of award and implementation of new Map Service Center contract to begin in FY 1999. (Kathy Miller, kathy.miller @fema.gov)

25. Respond to National Research Council report on alluvial fans. (Mike Grimm)

26. Initiate regulatory reform at 44CFR, Part 65.5. (Alan Johnson)

27. Complete riverine erosion study required by National Flood Insurance Reform Act of 1994. (Mike Grimm)

28. Complete coastal erosion studies required by National Flood Insurance Reform Act of 1994. (Mark Crowell)

"Objectives," Continued on Page 8

SCORECARD

Last Updated February 1999

OBJECTIVE	COMPLETED ITEMS
1. Develop and implement marketing plan.	***Work In Progress*** bimonthly map modernization bulletin-inaugural issue published September 9, 1998. ***Work In Progess*** issues posted on Map Modernization Web Site. Storyboards depicting Chronology of Flood Mapping Products from 1968 to the Future displayed at FEMA Headquarters. Display highlighting major components/benefits of map modernization developed for travel to conferences and Project Impact events.
2. Develop and implement revised, minimum base map standards for hazard mapping.	Final draft for DFIRM 2.0 and 2.1 Base Map Specifications completed November 1998.
2.5. Complete assessment of advanced technologies for preparing topographic mapping and develop appendices to "Guidelines and Specifications for Study Contractors."	Draft on LIDAR specifications completed and reviewed January 1999. Members of Technical Mapping Advisory Council participated in Development Committee.
6. Initiate pilot Cooperating Technical Communities Program.	Ongoing discussions with CTCs.
8. Develop standards and procedures for mapping future conditions' hydrology.	First draft of Future Conditions Hydrology report completed.
9. Develop Technical Services Division's Web site.	Web Architecture completed. *www.fema.gov/mit/tsd*
12. Establish partnership with Fish and Wildlife Service to improve mapping of Coastal Barrier Resource System (CBRS) areas.	CBRS Community database on FIA/ NFIP Web site. Dare County, North Carolina, pilot mapping project completed and a finished map set provided to the NC Congressional delegation. Monthly cooperation meeting between FEMA and U.S. Fish and Wildlife Service held.
14. Bring the toll-free FEMA Map Assistance Center on line.	Nationwide launch completed December 1998.

"Scorecard," Continued on Page 8

"Scorecard," Continued from Page 7

SCORECARD

OBJECTIVE	COMPLETED ITEMS
17. Develop new study processes and begin limited implementation in FY98, with at least one pilot in each territory.	☑ Presented draft recommendations at Engineers' Conference in Emmitsburg, Md., October 1998. ☑ Final report with recommendations to Mike Buckley December 31, 1998.
18. Fully implement multi-year contracts and task ordered contracts for procuring Flood Insurance Studies. Transfer the procurement process to the three territories.	☑ Report with recommendations completed November 1998.
19. Continue implementation of 5-Year Map Review/Update Process.	☑ Contacted 100 percent of mapped communities participating in the NFIP. ☑ Sent letters requesting mapping needs to over 19,000 communities.
22. Revise *Guidelines and Specifications for Flood Map Production Coordination Contractors* and develop Statement of Work and Request for Proposal for re-procuring Flood Map Production Coordination Contractor services to begin in FY2000.	☑ Guidelines revised and on the web February 1999.
27. Complete riverine erosion study required by NFIRA.	☑ First draft of Riverine Erosion Hazard Area report completed and mailed to Project Working Group (PWG) for review and comment.
32. Enter into Memorandum of Understanding with U.S. Department of Defense to allow FEMA to use the PPS code in Global Positioning System.	☑ Signed and approved Memorandum of Agreement November 1998.

"Objectives," Continued from Page 7

29. Continue maintenance level research on coastal erosion rate analysis and shoreline location forecasting. (Mark Crowell)

30. Participate as a member of the Community Rating System task force. (Alan Johnson)

31. Finalize "Guidelines and Specifications for Wave Height Studies," Volumes 1 and 2. (Doug Bellomo)

32. ☑ Participate as a National Coordinator in the Federal Civilian Agency Precise Positioning Service (PPS) Committee; enter into a Memorandum of Understanding with the Department of Defense to allow FEMA to use the PPS code in Global Positioning System units to enable more efficient spatial data collection; and organize the internal infrastructure necessary within FEMA to allow the regions to fully utilize this technology in program activities. (Erik Rourke, erik.rourke@fema.gov)

33. Revise and republish "Appeals, Revisions, and Amendments to NFIP Maps: A Guide for Community Officials," FIA 12. Include linkages to Cooperating Technical Communities program. (Eugene Zeizel, eugene.zeizel@fema.gov)

34. Represent FEMA at preparation meetings shaping the worldwide "Year of the Ocean" initiative being endorsed by the United Nations to promote and provide information and education regarding the impact of the ocean, seas, and coastal waters on everyday life. (Doug Bellomo)

35. Improve the Letter of Map Revision process by developing technical and administrative enclosures which succinctly describe map changes and community responsibilities as a result of Letters of Map Revision. (Doug Bellomo)

36. (removed)

37. Identify and compile FEMA's regulations and laws and recommend changes to remove or minimize impediments to FEMA's Map Modernization Plan. (Cecelia Lynch, cecelia.lynch@fema.gov)

FEMA Launches Map Assistance Center

The FEMA Map Assistance Center, created to provide technical support to homeowners, lenders and engineers and surveyors requesting Letters of Map Amendment, Letters of Map Revision Based on Fill and Letters of Determination Review, is now accessible to callers nationwide.

Callers can reach the center by dialing 1-877-336-2627 (FEMA MAP). Calls are automatically routed, depending on where they originate, to one of two locations: one that handles calls regarding properties in Regions I through V and one for properties in Regions VI through X. Individuals may call the center for answers to general questions about National Flood Insurance Program maps and related regulations, specific questions about the status of individual map amendment or map revision cases or ongoing studies, and general information about brochures and publications. They may also request application/certification forms and, if necessary, obtain clarification of how and when to complete the forms.

Operators rely on the center's database and the contractor-maintained Management Information System to answer callers' questions. Relevant facts are, therefore, at the operators' fingertips, which allows them to quickly provide callers with the most pertinent information. Depending on the nature of the call, operators are also able to transfer calls to the individual working on a specific case or study, a topic specialist or the appropriate FEMA contact. The Center is the latest addition to FEMA's array of toll-free numbers designed to enhance customer service by providing information about FEMA and various FEMA products.

Task Leader John Magnotti said call volume has increased significantly since the Center first opened. FEMA estimates receiving approximately 60,000 calls during 1999.

FEMA officials said that, although the Center's primary focus is to provide technical support to requestors, it will also provide a means to assess Customer Satisfaction. The Center will routinely make "callbacks" to a small percentage of callers to obtain their comments about the service they have received from FEMA.

John Magnotti *(*john.magnotti@fema.gov*) is a Hydraulic Engineer in the Hazards Study Branch of the Technical Services Division.*

OTHER IMPORTANT NUMBERS

For information about the NFIP's Preferred Risk Policy	1-800-427-9662
To order current FEMA publications	1-800-480-2520
Flood Insurance Information Hotline	1-800-427-4661
To order current FEMA floodplain maps	1-800-358-9616
FEMA's 24-hour FAX-on-demand system	1-202-646-FEMA TDD: 1-800-427-5593

On the Bandwagon

The following organizations have formally expressed their support of FEMA's Flood Map Modernization Plan:

- American Congress of Surveying and Mapping
- American Society of Civil Engineers
- Association of State Floodplain Managers
- National Association of Flood and Stormwater Management Agencies
- National Emergency Management Association
- National League of Cities
- National Flood Determination Association
- National Lenders Insurance Council
- Ohio River Basin Water Management Council
- Technical Mapping Advisory Council
- United States Geological Survey
- Western Governors' Association

"The U.S. Geological Survey would like to express support for your plan to modernize the flood hazard mapping associated with the National Flood Insurance Program (NFIP). The importance of the NFIP extends far beyond providing flood insurance. The data used to produce Flood Insurance Rate Maps…, as well as the maps themselves, are invaluable tools to scientists, floodplain managers, land-use planners, and individuals and organizations involved in disaster mitigation and recovery."

— Charles G. Groat, Director, USGS

FAQs Frequently Asked Questions Regarding The Effect That Revised Flood Hazards Have On Existing Structures

What factors determine flood insurance premiums?

A: A number of factors determine premiums for National Flood Insurance Program (NFIP) flood insurance coverage. Major factors include the amount of coverage purchased; the deductible; and the location, age, occupancy, and type of building. For newer buildings in floodplains, the elevation of the lowest floor relative to the elevation of the 1-percent-annual-chance flood can also be used to rate the policy.

My house is not in a floodplain according to the current map, but the new map will show it as being in a floodplain. Will I have to purchase flood insurance when the new map officially takes effect?

A: If you have Federal or federally related financing for the property in question and you do not already have flood insurance, your lender may contact you once the new map takes effect and require that you purchase flood insurance. If you do not purchase the insurance within 45 days after being informed that flood insurance is required, the lender can force place the insurance and charge you for the cost of it. If you dispute the lender's determination that your property is located in a floodplain, you and your lender can jointly request a Letter of Determination Review from the Federal Emergency Management Agency (FEMA) within 45 days of being informed by your lender that your property is located in a floodplain. If you have insurance before the new maps take effect, the basis for rating that policy remains unchanged (i.e., you can use the rate that was charged to you when your property was located outside the floodplain).

I have flood insurance, and my house is in a floodplain according to the current map. The new map, however, will show my house as being outside the floodplain. Will I have to continue carrying flood insurance when the new map officially takes effect?

A: If you have Federal or federally related financing for the property in question, you will no longer have a Federal requirement to purchase flood insurance when the new maps take effect; however, lenders retain the prerogative to require flood insurance, even for property that is not in a floodplain. If you wish to continue coverage once the new maps take effect, you may be eligible for preferred risk rates based on your property being outside the floodplain. You should have your policy re-rated using the new maps, which should lower your premium. Even if you are not required to purchase flood insurance, we encourage homeowners to continue coverage at the preferred risk rates, because you may be flooded by an event greater than the 1-percent-annual-chance chance event.

My house was built to the flood elevation shown on the current map (or a previous map). On the new map, my house will remain in the floodplain, but the flood elevation will increase. What will happen to my insurance premium when the new map officially takes effect?

A: If you can show that your house was built in compliance with local floodplain management regulations and the flood map in effect at the time of construction, the basis for rating your policy does not change and your premium will be the same. If you cannot show that your house was built in compliance at the time of construction, your policy will be re-rated using the new flood map, which may raise your premium. However, if you can show that your home has been continuously insured since before the map change, your premium will not be affected. If you do not have Federal or federally related financing, you are not required by Federal regulations to have flood insurance, although it is available to you.

My house was built to the flood elevation shown on the current map (or a previous map). On the new map, my house will remain in the floodplain, but the flood elevation will decrease. What will happen to my insurance premium when the new map officially takes effect?

A: You should contact your insurance agent to ensure that the policy is re-rated when the new map officially takes effect. The lower flood elevation may result in a lower premium.

My house was built in Zone AE to the flood elevation in effect at the time of construction. On the new map, my house will remain in the floodplain, but the zone designation will be changed to Zone VE. What will happen to my insurance premium when the new map officially takes effect?

A: If you can show that your house was built in compliance with local floodplain management regulations and the flood map in effect at the time of construction, the basis for rating your policy does not change and your premium will be the same when the new map officially takes effect. If you cannot show that your house was built in compliance at the time of construction, your policy will be re-rated when the new map takes effect using the new flood zone designation and flood elevations, which may raise your premium. However, if you can show that your home has been continuously insured since before the map change, your premium will not be affected.

My house is shown as being in Zone VE on the current map. On the new map, my house will remain in the floodplain, but the zone designation will be changed to Zone AE. What will happen to my insurance premium when the new map officially takes effect?

A: You should contact your insurance agent to ensure that the policy is re-rated when the new map officially takes effect. The change to a Zone AE designation will likely lower your premium.

My house is in a floodplain according to the current map. On the new map, my house will remain in the floodplain, but the flood elevation will be increased. Will my house be considered to be in violation of NFIP regulations when the new map officially takes effect?

A: Any house that can be shown to have been built in compliance with local floodplain management regulations and the flood map at the time of construction will continue to be considered compliant, even if the new maps will show an increase in flood elevation or a change to a more restrictive zone designation. However, should your house be substantially damaged (damage is 50 percent or more of the pre-damage market value) and you wish to repair it, you will be required to bring the entire structure into compliance with the zone designation and flood elevations in effect at the time the repairs take place. If the structure is less than substantially damaged, you do not need to refer to the flood map when repairing damages. Please note, however, that there may be more stringent state or local requirements that take precedence over those stated here. Regardless of whether your building is substantially damaged, you will likely need a building permit to make repairs and need to contact your local building official.

My house is in a floodplain. What do I do if I want to build an addition or otherwise improve it?

A: If the value of the addition or improvement to the house is less than 50 percent of the market value of the existing structure, you need only make sure that the improvement meets or exceeds the standards that were used in constructing the existing structure (assuming the existing structure was built in compliance at the time it was constructed). Additions or other improvements valued at 50 percent or more of the market value of the existing structure are considered substantial improvements. In such cases, the entire structure must be brought into compliance with the elevations on the map in effect at the time the improvement begins. Under certain circumstances only the addition needs to be elevated to the flood elevations shown on that map. Please note, however, that there may be more stringent state or local requirements that take precedence over those stated here. Regardless of whether your building is substantially improved, you will likely need a building permit to make the improvement and need to contact your local building official.

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*"**Mike's Message,**" continued from page 1*

While the Administration's budget request is a major step, a big challenge lies ahead. The U.S. Congress must take the next step in approving the funding. This will be difficult, particularly implementation of the new fee. In my discussions with staff of the Banking and Appropriations Committees in the U.S. Congress and with others in the lending community, many have expressed concern over the fairness of the fee. Frankly, this concern was anticipated.

"The $15 mortgage transaction fee is truly a user fee, with clear benefits to those who pay the fee."

The new fee proposal was based on an attempt to broaden the scope of paying beneficiaries of the maps. It is clearly unfair that the 4 million flood insurance policyholders bear the full burden of paying for the maps and have done so for the past 12 years, to the tune of $500 million. This unfairness was recognized in the House report on the 1990 Omnibus Budget Reconciliation Act, which states that, "[t]he Flood Insurance Rate Maps are used by many individuals for many purposes, not just for determining flood insurance rates… approximately one-half of the mapping expenses should be paid by the policy holders."

The fee proposal is also consistent with other provisions of the National Flood Insurance Reform Act of 1994 in that federally regulated lenders are required to make flood risk determinations for flood insurance purchase application. These lenders are allowed to pass on the cost of making these determinations to borrowers. Even those lenders that are not federally regulated are making determinations and passing the cost on to borrowers. In some instances, lenders also charge and collect a fee above the cost of the determination to cover their costs. It is expected that the $15 fee would likely be passed on as well. Collection and disbursement would be conducted within the settlement closing process, removing the lender from direct involvement.

Perhaps one of the most compelling aspects for a fee is that, with modernized mapping, determinations will be easier and the fees that lenders pass on to the borrower will fall, offsetting, totally or to some extent, the mortgage transaction fee. More accurate maps will also mean that the need for Letters of Map Amendment will decline, saving property owners the costs of hiring a surveyor, which in some cases can be as high as $1,000. The $15 mortgage transaction fee is truly a user fee, with clear benefits to those who pay the fee.

There is unanimous agreement that the flood hazard maps should be updated and modernized. Even critics of the mortgage transaction fee agree. This is encouraging, and the ongoing debate will be focused, not on whether to update and modernize the maps, but how to pay for it. Stay tuned. House and Senate Appropriation Committee hearings are scheduled for March 2 and March 4.

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*"**DFIRM,**" continued from page 1*

Basic features common to all new DFIRM products:

- Base map (community-based or DOQ)
- Geo-referenced FIRM and FBFM data
- Standard vector data structure for flood hazard data (1-percent and 0.2-percent-annual-chance floodplains, floodway, CBRS, BFEs, cross sections, ERMs)
- Standard database template that is expandable
- Standard graphic specifications
- Internal mismatches resolved
- Map Initiatives format
- Mappable LOMCs included
- Paneling scheme based on USGS Topographic Quadrangles
- Standard distribution file format(s)
- Electronic FIS text
- Metadata

Options for the new DFIRM product:

- Community-based or countywide-based
- External mismatches resolved
- Include restudy
- Fit existing profile to newer topographic information
- Expand database
- Fit Zone A areas to newer topographic information
- Map unmapped communities
- Improve FIS texts
- Convert datum to NAVD88
- Convert to metric
- Add supplemental images, scanned documents
- Add NGS benchmarks
- Add transects to coastal studies
- Include other hazards
- Include inventory of structures' layer
- Include other community options

We are open to suggestions and appreciate any feedback that we receive. Please send any comments, including suggestions for further options, to mapmod@fema.gov.

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